

THREE NEW SPECIES OF *RACINAEA* (TILLANDSIOIDEAE:  
BROMELIACEAE) FROM ECUADOR AND PERU

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ABSTRACT

Study of specimens at the U.S. National Herbarium (US) and from the Marie Selby Botanical Gardens (SEL) have revealed three novelties in *Racinaea* Spencer & Smith. The taxa are described as *Racinaea euryelytra* J.R. Grant, *sp. nov.* from Ecuador, and *R. kalliantha* J.R. Grant, *sp. nov.* and *R. lymanSmithiana* J.R. Grant *sp. nov.* from Perú.

KEY WORDS: Bromeliaceae, Tillandsioideae, *Racinaea*, Ecuador, Perú

*Racinaea euryelytra* J.R. Grant, *sp. nov.* TYPE: ECUADOR. Loja: 88 km north of Loja on road to Cuenca, 3050 m, 04 Oct 1981, *Luther, Besse, & Halton 689* (HOLOTYPE: SEL). Other material examined. ECUADOR. Loja: south of Jimbura in dryer cloudforest, Mar 1984, *Höijer & Dalstrom 653* (SEL); Zamora-Chinchipec: Cordillera del Condor, ca. 1500 m, Jun 1990, *Girko E90-190J* (SEL).

*R. parviflora* (Ruiz & Pavon) Spencer & Smith affinis sed robustior differt, ramis lateralis brevioribus, vaginaque grandior et plus rotundatis, foliis crassis coriaceis, sepalisque longioribus, scapo robustiore.

Plants epiphytic, acaulescent, flowering 18-38 cm tall. Leaves triangular in overall outline, 15-20 per plant; sheaths large, ovate, distinct, giving the plant a very tufted and inflated appearance, 3.5-6.0 cm long, 3.5-6.0 cm wide; blades linear-triangular, 60-120 mm long, 2-8 mm wide. Inflorescence bipinnate, or



Figure 1. Holotype of *Racinaea euryelytra* J.R. Grant.

tripinnate at base to bipinnate towards apex. Secondary branches 10-28 mm long. Tertiary branches 7-10 mm long. Rachises straight to merely geniculate. Primary bracts acute, carinate, 9-25 mm long, 3-6 mm wide, becoming gradually shorter towards the apex. Floral bracts acute, ovate, carinate, 3 mm long, 2.5-3.0 mm wide. Sepals obovate, carinate, 3.8-4.0 mm long, 3 mm wide, exceeding the floral bracts. Petals unknown.

The epithet derives from the Greek, *eury*, wide, and *elytra*, sheath, to emphasize its large, wide, leaf sheaths.

The three specimens attributed to this new species were previously identified as *Tillandsia* (*Racinaea*) *adpressa* André. They are, however, not related to *T. adpressa* but rather likely most closely to *R. parviflora* from which they differ by their more robust appearance, shorter lateral branches, larger, rounder sheaths, thick, leathery leaves, longer sepals, and more robust scape. *Racinaea euryelytra* is a distinct taxon recognizable by its tufted appearance formed by leaves with large sheaths and narrow blades.

*Racinaea kalliantha* J.R. Grant, *sp. nov.* TYPE: PERU. Dept. Piura: Prov. Huancabamba, Loma redonda, 2400 m, 15 Sep 1981, *Sagástegui 10210* (HOLOTYPE: SEL).

*R. blassii* (L.B. Smith) Spencer & Smith *affinis* sed foliis unicoloratis differt, internodia, bracteis florigeris et sepalis longioribus, indumentis ferrugineis, inflorescentia paucior floribus, et ramis lateralis brevioribus.

Plants epiphytic, acaulescent, flowering 33 cm tall. Leaves linear-triangular in overall outline, 8-9 per plant, 20-22 cm long; sheaths ovate, gradually merging into the blades, 6-7 cm long; blades linear, 14-15 cm long, 1-10 mm wide. Inflorescence tripinnate. Primary bracts linear, 8-25 mm long, 3-5 mm wide, becoming gradually shorter towards the apex of the inflorescence. Secondary branches 3.5-6.0 cm long. Tertiary branches 1.5-3.5 cm long. Floral bracts ovate, acute, 3.5-4.0 mm long, 3 mm wide. Sepals ovate, acute, carinate, 3.5-4.5 mm long, 3.0-3.5 mm wide. Scape, inflorescence, rachises, floral bracts, primary bracts, and sepals white-pilose to ferruginous-lepidote. Sepals exceeding the floral bracts. Petals exceeding the sepals, 6 mm long, cream-colored. Androecium and gynoecium included.

The epithet derives from the Greek, *kalos*, beautiful, and *anthos*, flower, for the showy flowers of the plant.

*Racinaea lymansmithiana* J.R. Grant, *sp. nov.* TYPE: PERU. Dept. Piura: Prov. Ayabaca, Bosque de Huamba, 2,950 m, 20 Sep 1987, *Cano 1449* (HOLOTYPE: US).



Figure 2. Holotype of *Racinaea kalliantha* J.R. Grant.



Figure 3. Holotype of *Racinaea lymansmithiana* J.R. Grant.

*R. flexuosa* (Baker) Spencer & Smith affinis sed foliis brevior differt, inflorescentia confertior compactis pilosior, rachidibus flexuosior, sepalis late obovatis.

Plants epiphytic, acaulescent, flowering 43 cm tall. Leaves broadly-triangular in overall outline, 8-10 per plant, 19-24 cm long; sheaths ovate, gradually merging into the blades, 6-9 cm long, 5-7 cm wide at their broadest; blades linear-triangular 13-15 cm long, 3-15 mm wide. Inflorescence primarily tripinnate, but bipinnate at apex. Scape 24 cm long, inflorescence 19 cm long, both white pilose. Rachises, primary bracts, floral bracts, and sepals densely ferruginous-lepidote. Rachises geniculate. Primary bracts 3-25 mm long, 2-8 mm wide, linear, becoming smaller toward apex of inflorescence. Secondary branches 20-47 mm long, tertiary branches 15-20 mm long. Floral bracts acute, ovate in overall outline, 2.8-3.0 mm long, 3 mm wide at broadest. Sepals, obovate, ferruginous-lepidote, exceeding the floral bracts, 4 mm long, 2.5-3.0 mm wide. Petals unknown. Fruit exceeding the calyx, at least twice its length.

The species honors Dr. Lyman Bradford Smith, 1904, authority of the Bromeliaceae.

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